



# **STREAM ECOLOGY & RESTORATION WORKSHOP**

## **September 18th, 2004**

### **Soap Stone Branch – Patapsco Valley S.P. (Avalon Area)**

### **Howard Co.**

- 9:00**    **Volunteers arrive at Pavilion 33; Patapsco Valley S.P. (Avalon Area)**  
**Stream Macroinvertebrates Make and Take**
- 9:30**    **Overview of the Day**
- 9:35**    **Stream Ecology & Macroinvertebrate Community**  
*by Rita Bruckler, Resource Assessment Service, MD-DNR*  
Overview of stream morphology and the macroinvertebrate community found in a piedmont stream. Exercises will help participants learn to identify stream organisms and how they and riparian features impact water quality.
- 10:20**    **Break**
- 10:30**    **Riparian Buffers and Streams**  
*by Matthew Chasse, Watershed Services, MD-DNR*  
Overview of riparian buffers and how they influence streams. Review basic plant ID techniques and practice with both native and invasive species.
- 11:15**    **Overview of TEAM DNR Streams Programs**  
*by Matthew Chasse, Watershed Services, MD-DNR*  
Learn about the progression of the TEAM streams programs and how they all fit together.
- 11:35**    **Lunch & Finish Stream Macroinvertebrate Make and Take**
- 12:10**    **Walk to Soap Stone Branch**  
**Stream Sampling & TEAM Sampling Activities**  
*Led by Rita Bruckler and Matthew Chasse*
- Review of stream sampling equipment
  - First look at Stream
  - Identify stream habitats for macroinvertebrates.
  - As a group, sample the stream for macroinvertebrates using D-net sampling techniques. Collected specimens are identified and recorded.
  - In smaller groups, sample stream for macroinvertebrates, identify samples, and record data
  - Discuss Results
- 1:10**    **Vegetation Plots and TEAM Vegetation Sampling Activities**  
*Led by Matthew Chasse and Rita Bruckler*
- Review of vegetation sampling equipment.
  - Finding and marking a vegetation sampling plot.
  - Identify Vegetation and canopy structure and record data
  - Discuss Results
- 2:00**    **Stream Water Quality Sampling and TEAM Sampling Activities**  
*Led by Rita Bruckler and Matthew Chasse*
- Review of stream water quality sampling equipment
  - Sample the stream water quality and record data
  - Discuss results and compare to macroinvertebrate data

## 2:30 Opportunities for Stream Restoration

*Led by Matthew Chasse*

- Review of stream data and look at opportunities for restoration activity.
- Restoration activities are Tree Planting or Invasive Species Removal
- Discuss the basics of a Restoration Project
- Review materials needed for a restoration

## 3:00 Workshop Ends - Take Copy of "Maryland Streams – An Undiscovered Realm" home for review.

***Volunteers should be prepared to get wet in a stream. If you have hip waders or waterproof boots bring them. You should also bring bag lunches. There are bathrooms near the pavilion***

## Directions to Patapsco Valley State Park (Avalon Area)

- *Avalon/Glen Artney/Orange Grove/Lost Lake Areas* - From the Beltway (I-695) Take Rt. 1 (Exit 12-A) toward Elkridge. Follow Rt. 1 South about 3 miles to South St. Turn right. Park entrance is on the left.

From I -95 take I-195 to Rt. 1 (Exit 3) toward Elkridge to South St. Turn right. Park entrance is on the left.

From Howard County follow Rt. 1 through Elkridge and into Baltimore County. Turn left onto South St. Park entrance is on the left.

Follow park entrance Road to Glen Artney Area.

After passing through the tunnel the road forks. Go to the right and park at Pavilion 33.

